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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,495	04/22/2004	William Taylor	60027.0347US01/BS#030290	6926

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EXAMINER	
SHIVERS, ASHLEY L	
ART UNIT	PAPER NUMBER
2619	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/829,495	TAYLOR ET AL.	
	Examiner	Art Unit	
	ASHLEY L. SHIVERS	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 March 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on March 7, 2008 has been entered. Claims 1-22 have been amended. No claims are canceled. No claims have been added. Claims 1-22 are still pending in this application, with claims 1, 13 and 22 being independent.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Coile et al. (**U.S. Patent No. 6,108,300**), hereinafter referred to as Coile.

Regarding claim 1, Coile teaches a method for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the method comprising:

providing a network management module (**All state transitions are noted in a syslog to the system administrator so that appropriate action may be taken, therefor the administrator can initiate the renaming of the circuits; See col. 9 lines 7-10**) for renaming a first logical circuit identifier for a first logical circuit in the data network to a second logical circuit identifier for a second logical circuit utilized for rerouting data from the first logical circuit in the data network (**When the primary device fails the active MAC address and IP address are changed to the standby MAC and IP addresses; See Fig. 7, 730 and col. 4 lines 11-15**); and

renaming a logical circuit label for the first logical circuit (**When the primary device fails the active MAC address and IP address are changed to the standby MAC and IP addresses; See Fig. 7, 730 and col. 4 lines 11-15**) in a logical element module (**Central processing unit; See col. 12 line 59**) in communication with the network management module (**The interfaces in the system contain associated logic that may control tasks such as media control and management; See col. 13 lines 5-7**),

wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the first logical circuit has been rerouted (**The standby device becomes active when the primary device fails and the primary device changes MAC and IP addresses to standby; See col. 2 lines 56-58 and col. 4 lines 11-15**), and

wherein the renamed logical circuit label includes the status of the failed logical circuit (**Each network device also has a series of flags which indicate the status of the device. A failed/not failed flag indicates whether the network device has failed or not failed; See col. 7 lines 53-54 and 65-66**) and indicates that the logical circuit identified by a customer ID (**Active IP address; See col. 8 lines 30-36**) for communicating data between a first and second location has been rerouted (**Once the primary connection has failed, the backup connection becomes the active and takes over the IP address and MAC address; See col. 4 lines 11-15 and col. 8 lines 30-36**).

Regarding claim 3, Coile further teaches the method of claim 1, wherein the second logical circuit is a logical failover circuit in the data network (**A backup network device; See Figs. 1-3, 120, 220, 310; col. 2 lines 56-58**).

Regarding claim 4, Coile further teaches the method of claim 1, wherein the second logical circuit is a currently unused logical circuit in the data network (**See Figs. 1-3, 120, 220 and 310; col. 2 lines 56-58**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 2, 5-6, 11, 13-15, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coile in view of Ashton et al. (**U.S. Patent No. 6,181,679**), hereinafter referred to as Ashton.

Regarding claim 2, Coile further teaches the method of claim 1, wherein renaming a first logical circuit identifier for a first logical circuit in the data network to a second logical circuit identifier for a second logical circuit utilized for rerouting data from the first logical circuit in the data network, comprises:

accessing a network device provisioned for routing data over the first logical circuit in the data network (**A network device in the active state handles packets according to its configuration. The client sends data to the primary network device; See Fig. 1 and col. 8 lines 30-31**);

provisioning the second logical circuit in the network device for rerouting the data from the first logical circuit, wherein provisioning the second logical circuit includes assigning the second logical circuit identifier to identify the second logical circuit (**A backup network device; See Figs. 1-3, 120, 220, 310; col. 2 lines 56-58**); and

renaming the first logical circuit identifier to the second logical circuit identifier (**See col. 2 lines 56-58 and col. 4 lines 11-15**).

Coile fails to teach of deleting the first logical circuit upon detecting a failure.

Ashton teaches of deleting the first logical circuit in the network device upon detecting a failure in the first logical circuit (**The "F" bit is used by a network management system to remove the failed segments from service and to permit the substitution of a segment which is operative; See col. 3 lines 22-24**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include deleting the first logical circuit upon detecting a failure in the first logical circuit taught by Ashton in order to prevent traffic from continuing to be passed over this inoperable circuit.

Regarding claims 5 and 6, Coile fails to teach the method of claim 1 further comprising the first and second logical circuit identifiers being DLCIs.

Ashton teaches of the first and second logical circuit identifiers being data link connection identifiers (DLCI) (**The virtual circuit segments are identified by a DLCI; See col. 3 lines 16-18**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include the first and second logical circuit identifiers being data link connection identifiers taught by Ashton in order to tell the network how to route the data.

Regarding claim 11, Coile fails to teach the method of claim 1, wherein the network is frame relay.

Ashton teaches of the data network being a frame relay network (**Fig. 1 is shown as a frame relay network; See col. 4 lines 55-57**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include the data network being a frame relay network taught by Ashton in order to emphasize the type of network that can be implemented.

Regarding claim 13, Coile teaches of a system for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the system comprising:

a network device for establishing a communication path for a logical circuit and a logical failover circuit in the data network (**Active and backup network devices; See Figs. 1-3**);

a logical element module (**Central processing unit; See col. 12 line 59**) in communication with the network device for configuring the logical circuit and the logical failover circuit (**The interfaces in the system contain associated logic that may control tasks such as media control and management; See col. 13 lines 5-7**);

a network management module, in communication with the logical element module (**All state transitions are noted in a syslog to the system administrator so that appropriate action may be taken, therefor the administrator can initiate the renaming of the circuits; See col. 9 lines 7-10**) for:

identifying a failure in the logical circuit (**When the device transitions to a new state the network management module is able to identify that the circuit has failed; See col. 9 lines 7-10**);

establishing the communication path for the logical failover circuit to reroute the data from the failed logical circuit (**The standby device becomes active when the primary device fails and the primary device changes MAC and IP addresses to standby; See col. 2 lines 56-58 and col. 4 lines 11-15**);

assigning a logical failover circuit identifier to identify the logical failover circuit (**A backup network device used when the primary has failed; See col. 8 lines 31-36**);

renaming a logical circuit identifier for the failed logical circuit to the logical failover circuit identifier in the network database (**The standby device becomes active when the primary device fails and the primary device changes MAC and IP addresses to standby; See col. 2 lines 56-58 and col. 4 lines 11-15.**); and

renaming a logical circuit label for the failed logical circuit in the logical element module (**When the primary device goes down, it is renamed with the standby MAC and IP address that it receives from the logical element module.**),

wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the failed logical circuit has been rerouted (**The standby device becomes active when the primary device fails and the primary device changes MAC and IP addresses to standby; See col. 2 lines 56-58 and col. 4 lines 11-15**), and

wherein the renamed logical circuit label includes the status of the failed logical circuit and indicates that the logical circuit identified by a customer ID (**Active IP address; See col. 8 lines 30-36**) for communicating data between a first and second location has been rerouted (**Once the primary connection has failed, the backup connection becomes the active and takes over the IP address and MAC address; See col. 4 lines 11-15 and col. 8 lines 30-36**).

Coile fails to teach of deleting the communication path for the failed logical circuit.

Ashton teaches of deleting the communication path for the failed logical circuit in the network device (**The "F" bit is used by a network management system to remove the failed segments from service and to permit the substitution of a segment which is operative; See col. 3 lines 22-24**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include deleting the first logical circuit upon detecting a failure in the first logical circuit taught by Ashton in order to prevent traffic from continuing to be passed over this inoperable circuit.

Regarding claims 14 and 15, Coile fails to teach of the system of claim 13, wherein the logical and logical failover circuit identifiers are DLCIs.

Ashton teaches of the logical circuit identifiers being data link connection identifiers (DLCI) (**The virtual circuit segments are identified by a DLCI; See col. 3 lines 16-18**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the system of Coile to include the logical and logical failover circuit identifiers being data link connection identifiers taught by Ashton in order to tell the network how to route the data.

Regarding claim 20, Coile fails to teach of the system of claim 13, wherein the network is frame relay.

Ashton teaches of the data network is a frame relay network (**Fig. 1 is shown as a frame relay network; See col. 4 lines 55-57**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the system of Coile to include the data network being a frame relay network taught by Ashton in order to emphasize the type of network that can be implemented.

Regarding claim 22, Coile teaches a method for fail-safe renaming of logical circuit identifiers for rerouted logical circuits in a data network, the method comprising:

providing a network management module (**All state transitions are noted in a syslog to the system administrator so that appropriate action may be taken, therefor the administrator can initiate the renaming of the circuits; See col. 9 lines 7-10**) for:

accessing a network device provisioned for routing data over a first logical circuit in the data network (**A network device in the active state handles packets according to its configuration. The client sends data to the primary network device; See Fig. 1 and col. 8 lines 30-31**);

provisioning a second logical circuit in the network device for rerouting the data from the first logical circuit, wherein provisioning the second logical circuit includes assigning a second logical circuit identifier to identify the second logical circuit (**A backup network device; See Figs. 1-3, 120, 220, 310; col. 2 lines 56-58**);

renaming a first logical circuit identifier to the second logical circuit identifier (**The standby device becomes active when the primary device fails and the primary device changes MAC and IP addresses to standby; See col. 2 lines 56-58 and col. 4 lines 11-15**);and

renaming a logical circuit label for the first logical circuit (**When the primary device fails the active MAC address and IP address are changed to the standby MAC and IP addresses; See Fig. 7, 730 and col. 4 lines 11-15**) in a logical element module (**Central processing unit; See col. 12 line 59**) in communication with the network management module (**The interfaces in the system contain associated logic that may control tasks such as media control and management; See col. 13 lines 5-7**),

wherein the renamed logical circuit label is utilized to indicate that the logical circuit data from the first logical circuit has been rerouted (**The standby device becomes active when the primary device fails and the primary device changes MAC and IP addresses to standby; See col. 2 lines 56-58 and col. 4 lines 11-15**), and

wherein the renamed logical circuit label includes the status of the failed logical circuit and indicates that the logical circuit identified by a customer ID (**Active IP address; See col. 8 lines 30-36**) for communicating data between a first and second location has been rerouted (**Once the primary connection has failed, the backup connection becomes the active and takes over the IP address and MAC address; See col. 4 lines 11-15 and col. 8 lines 30-36**).

Coile fails to teach of deleting the first logical circuit in the network device upon detecting a failure.

Ashton teaches of deleting the first logical circuit in the network device upon detecting a failure in the first logical circuit (**The "F" bit is used by a network management system to remove the failed segments from service and to permit the substitution of a segment which is operative; See col. 3 lines 22-24**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include deleting the first logical circuit upon detecting a failure in the first logical circuit taught by Ashton in order to prevent traffic from continuing to be passed over this inoperable circuit.

6. Claims 7-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coile in view of Daley (**U.S. Patent No. 5,650,994**), hereinafter referred to as Daley.

Regarding claims 7 and 8, Coile fails to teach the method of claim 1, wherein the first and second logical identifiers are VPI/VCIs.

Daley teaches of the first and second logical circuit identifiers being virtual path/virtual circuit identifiers (VPI/VCI) **(See col. 20 lines 51-62)**.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include VPI/VCI identifiers taught by Daley in order to identify the user and associated port.

Regarding claim 9, Coile fails to teach the method of claim 1, wherein the first and second logical circuits are PVCs.

Daley teaches of the first and second logical circuits being permanent virtual circuits **(The data tables thus define "permanent virtual circuits" (PVC's) between the providers and the input ports of the access subnetwork; See col. 35 lines 45-47)**.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include the logical circuits being PVCs taught by Daley in order to provide the type of path that the data is going to use to travel.

Regarding claim 12, Coile fails to teach the method of claim 1, wherein the data network is ATM.

Daley teaches of the data network being an asynchronous transfer mode (ATM) network (**In the preferred implementation of this network, the backbone subnetwork comprises one or more asynchronous transfer mode (ATM) switches; See col. 7 lines 20-22**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include the data network being an ATM network taught by Daley in order to emphasize the type of network that can be implemented.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coile in view of Wahl et al. (**U.S. PGPub 2002/0089985**), hereinafter referred to as Wahl.

Regarding claim 10, Coile fails to teach the method of claim 1, wherein the first and second logical circuits are SVCs.

Wahl teaches of the first and second logical circuits being switched virtual circuits (**See [0047] lines 3-5**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile to include the logical circuits being SVCs taught by Wahl in order to provide a level of quality of service for the data transfer.

8. Claims 16-18 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coile in view of Ashton in further view of Daley.

Regarding claims 16 and 17, Coile in view of Ashton fails to teach of the system of claim 13, wherein the logical and logical failover circuit identifiers are VPI/VCIs.

Daley teaches of the logical and logical failover circuit identifiers being virtual path/virtual circuit identifiers (VPI/VCI) **(See col. 20 lines 51-62)**.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile in view of Ashton to include VPI/VCI identifiers taught by Daley in order to identify the user and associated port.

Regarding claim 18, Coile in view of Ashton fails to teach of the system of claim 13, wherein the logical and logical failover circuits are PVCs.

Daley teaches of the logical circuit and the logical failover circuit being permanent virtual circuits **(The data tables thus define "permanent virtual circuits" (PVC's) between the providers and the input ports of the access subnetwork; See col. 35 lines 45-47)**.

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile in view of Ashton to include the logical circuit being a PVC taught by Daley in order to provide the type of path that the data is going to use to travel.

Regarding claim 21, Coile in view of Ashton fails to teach the system of claim 13, wherein the network is ATM.

Daley teaches of the data network being an asynchronous transfer mode (ATM) network (**In the preferred implementation of this network, the backbone subnetwork comprises one or more asynchronous transfer mode (ATM) switches; See col. 7 lines 20-22**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile in view of Ashton to include the data network being an ATM network taught by Daley in order to emphasize the type of network that can be implemented.

9. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Coile in view of Ashton in further view of Wahl.

Regarding claim 19, Coile in view of Ashton fails to teach the system of claim 13, wherein the logical and logical failover circuits are SVCs.

Wahl teaches of the logical circuit and the logical failover circuit being switched virtual circuits (**See [0047] lines 3-5**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention, to modify the method of Coile in view of Ashton to include the logical circuits being SVCs taught by Wahl in order to provide a level of quality of service for the data transfer.

Response to Arguments

10. Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

12. Any response to this action should be **faxed** to (571) 273-8300 or **mailed** to:

Commissioner of Patents,
P.O. Box 1450
Alexandria, VA 22313-1450

Hand delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHLEY L. SHIVERS whose telephone number is (571) 270-3523. The examiner can normally be reached on Monday-Thursday 8:00-6:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chirag Shah can be reached on (571) 272-3144. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ashley L Shivers/
Examiner, Art Unit 2619
5/28/2008

/Chirag G Shah/

Supervisory Patent Examiner, Art Unit 2619